

**Notice of Allowability**

Application No.

10/611,628

Applicant(s)

GILL, HARDAYAL SINGH

Examiner

A. Dexter Tugbang

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Election filed on 1/3/05.
2. ☒ The allowed claim(s) is/are 42-50.
3. ☒ The drawings filed on 30 June 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

### **DETAILED ACTION**

1. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered Claims 44 and 42 (on page 3 of the Preliminary Amendment filed on 6/30/03) have been renumbered as Claims 43 and 44, respectively.

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

The application has been amended as follows.

#### In the Specification

The changes on page 1, lines 2-3, as noted on page 1 of the Preliminary Amendment (filed on 6/30/03), have been replaced with:

#### **--REFERENCE TO RELATED APPLICATIONS**

This application is a divisional application of Serial No. 09/760,937, filed on 1/16/2001 and now U. S. Patent 6,655,008, which is a divisional application of 09/344,817, filed on 6/25/1999 and now U. S. Patent No. 6,219,208.--

#### In the Claims

Claims 42 and 47 have been amended as follows. The changes to the claims are minor in nature and are necessary to correct mere informalities with the claim language. These changes to the claims do not affect the scope of the claimed invention.

In Claim 42, “the unordered steps of” (line 2) has been deleted; “layer” (line 4) has been replaced with --layers--; “fist” (line 4) has been replaced with --first--; “ans” (line 8) has been replaced with --and--; and “spacer layer that has” (line 23) has been replaced with --spacer layers that have--.

In Claim 47, --further-- has been inserted before “comprising” (line 3); and “the unordered steps of” (line 3) has been deleted.

### *Reasons for Allowance*

3. The following is an examiner’s statement of reasons for allowance: the prior art does not teach all of the limitations of the claimed invention including forming a nonmagnetic conductive specular reflector layer structure and forming a self-pinned layer between the second spacer layer and the specular reflector layer structure having a magnetic moment.

The prior art reference to Fox et al (U. S. Patent 5,974,657) teaches that it is known to form a spin valve sensor that includes forming an antiferromagnetic pinning layer 322 (in Fig. 11) and forming a pinned layer structure 316, 318 between a first spacer layer 314 and the antiferromagnetic pinning layer 322. However, nowhere does Fox teach forming a nonmagnetic conductive specular reflector layer structure. Moreover, Fox does not teach forming a self-pinned layer between a second spacer layer and the specular reflector layer structure.

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To modify Fox et al by including any specular reflector layer structure would destroy the Fox et al invention.

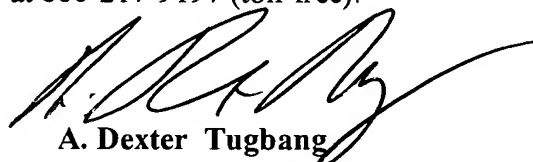
Accordingly, Claims 42-50 are allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to A. Dexter Tugbang whose telephone number is 571-272-4570. The examiner can normally be reached on Monday - Friday 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 571-272-4690. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
A. Dexter Tugbang  
Primary Examiner  
Art Unit 3729

June 9, 2005